



STATE OF MARYLAND

DHMMH

Maryland Department of Health and Mental Hygiene
300 W. Preston Street, Suite 202, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

Office of Preparedness & Response
Sherry Adams, Director
Isaac P. Ajit, Deputy Director

July 6, 2012

Public Health & Emergency Preparedness Bulletin: # 2012:26 Reporting for the week ending 06/30/12 (MMWR Week #26)

CURRENT HOMELAND SECURITY THREAT LEVELS

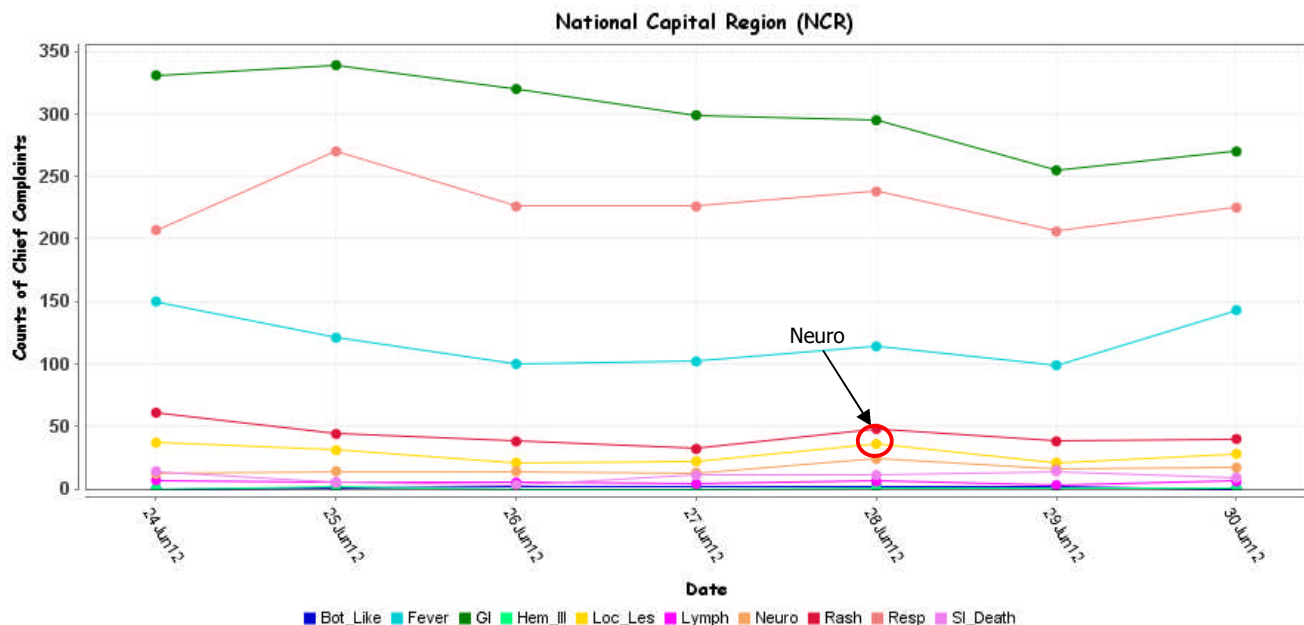
National: No Active Alerts
Maryland: Level One (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

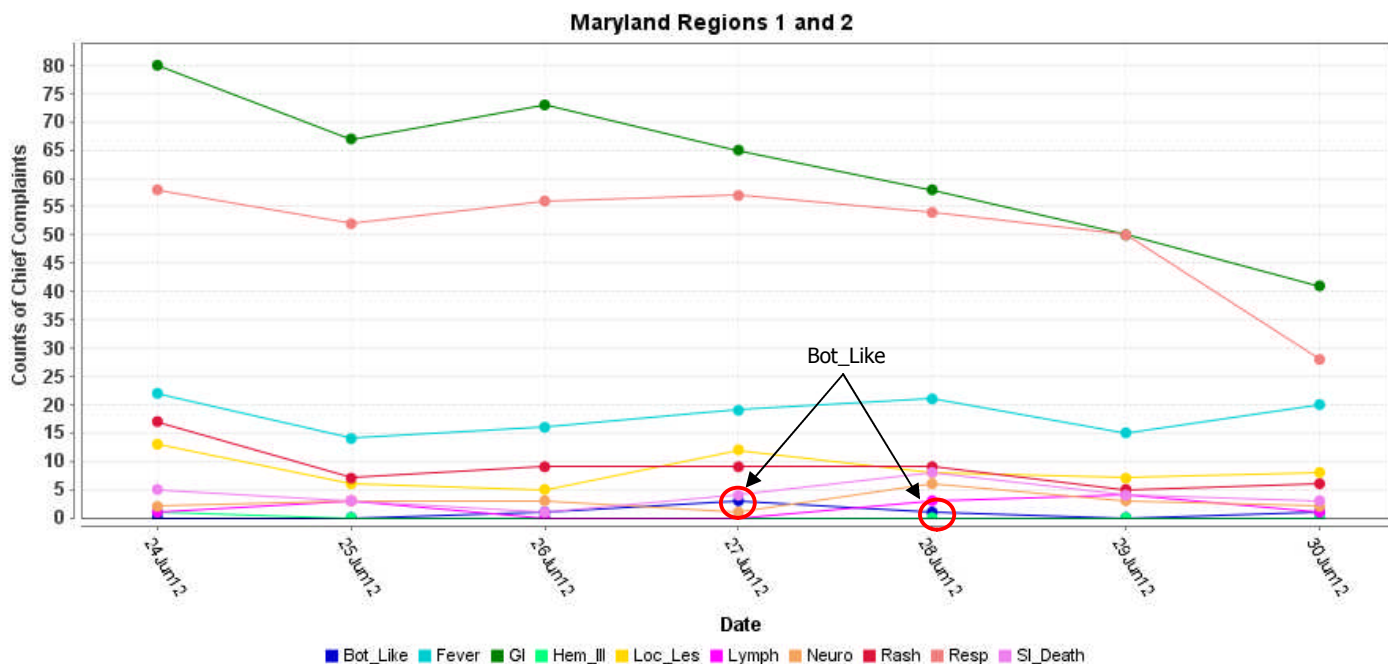
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

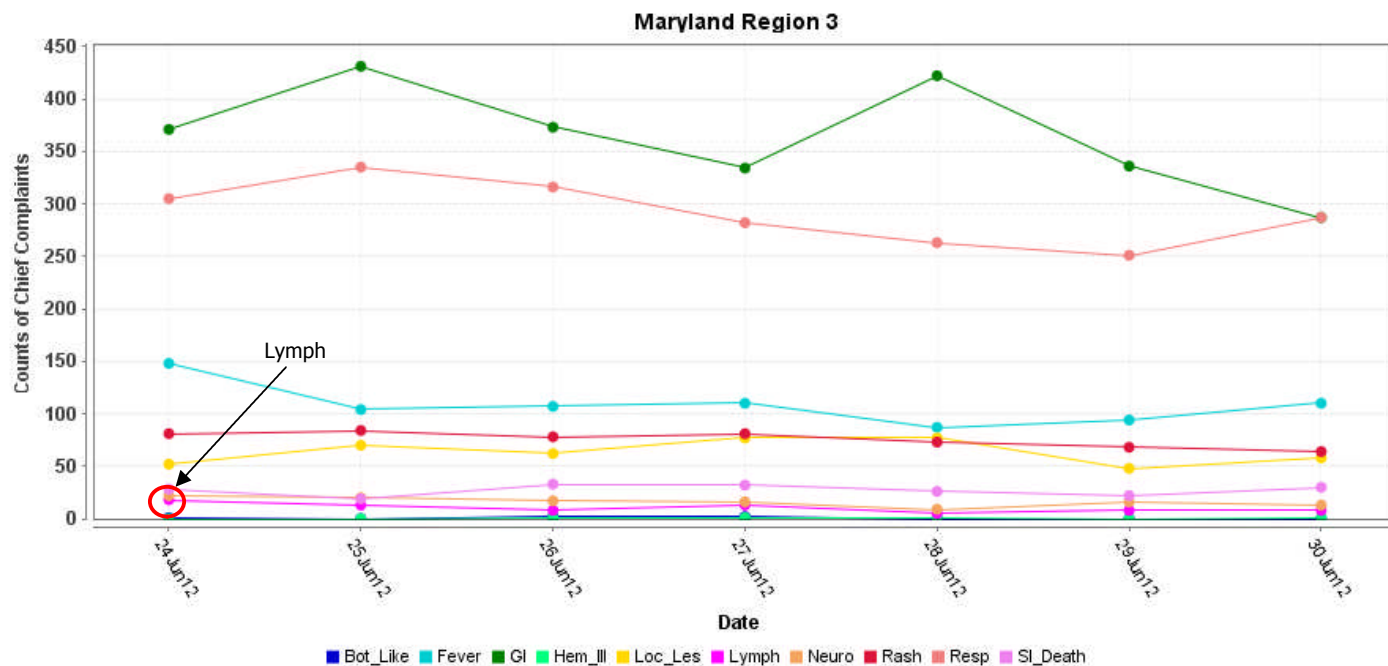


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

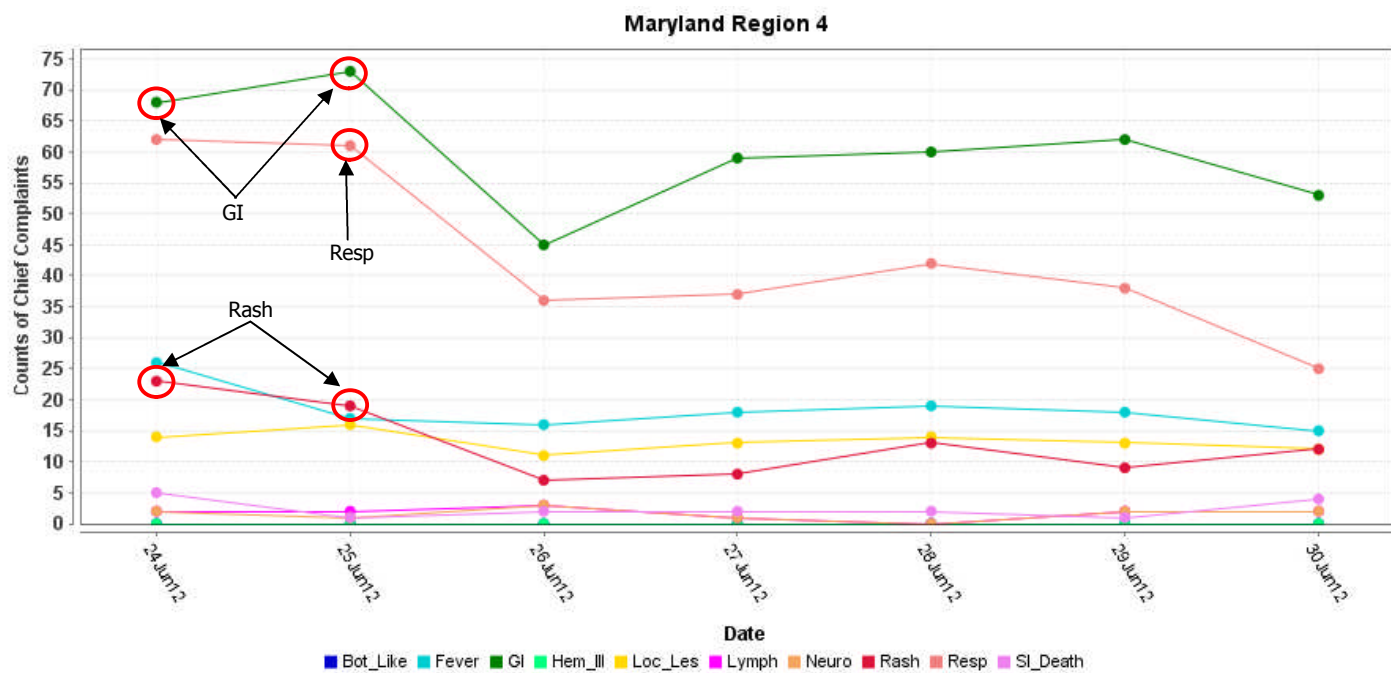
MARYLAND ESSENCE:



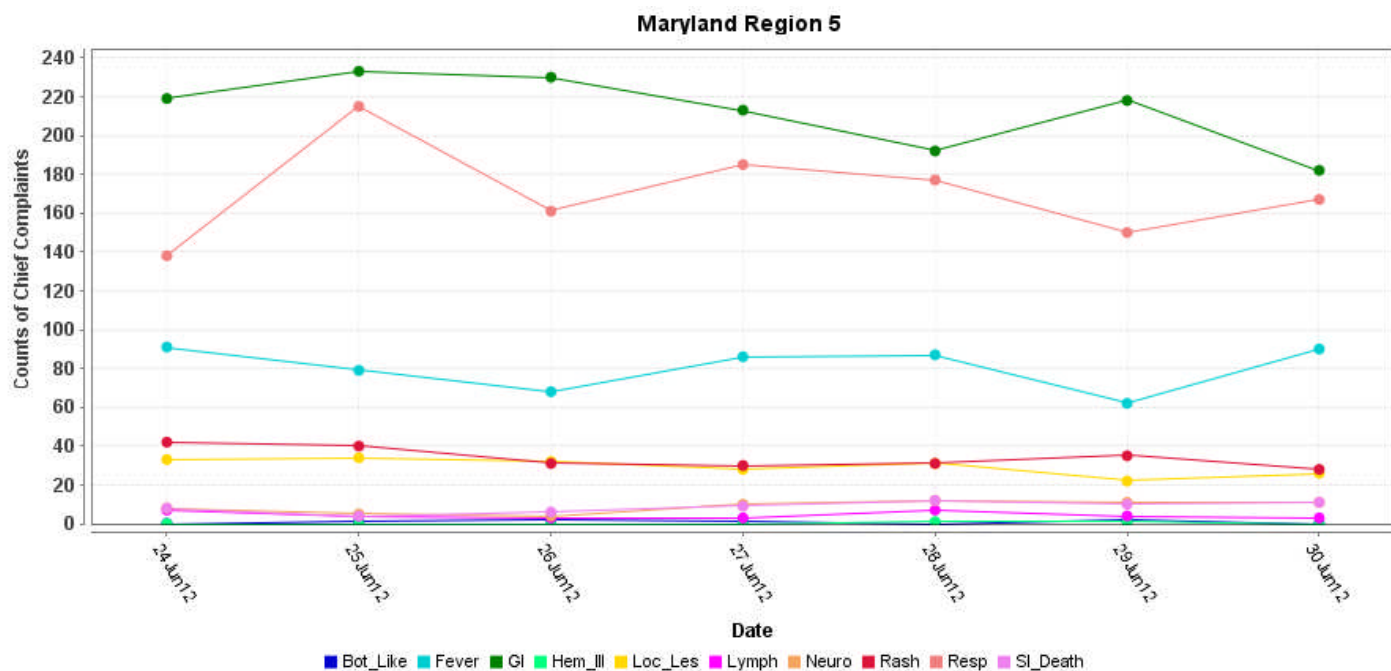
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

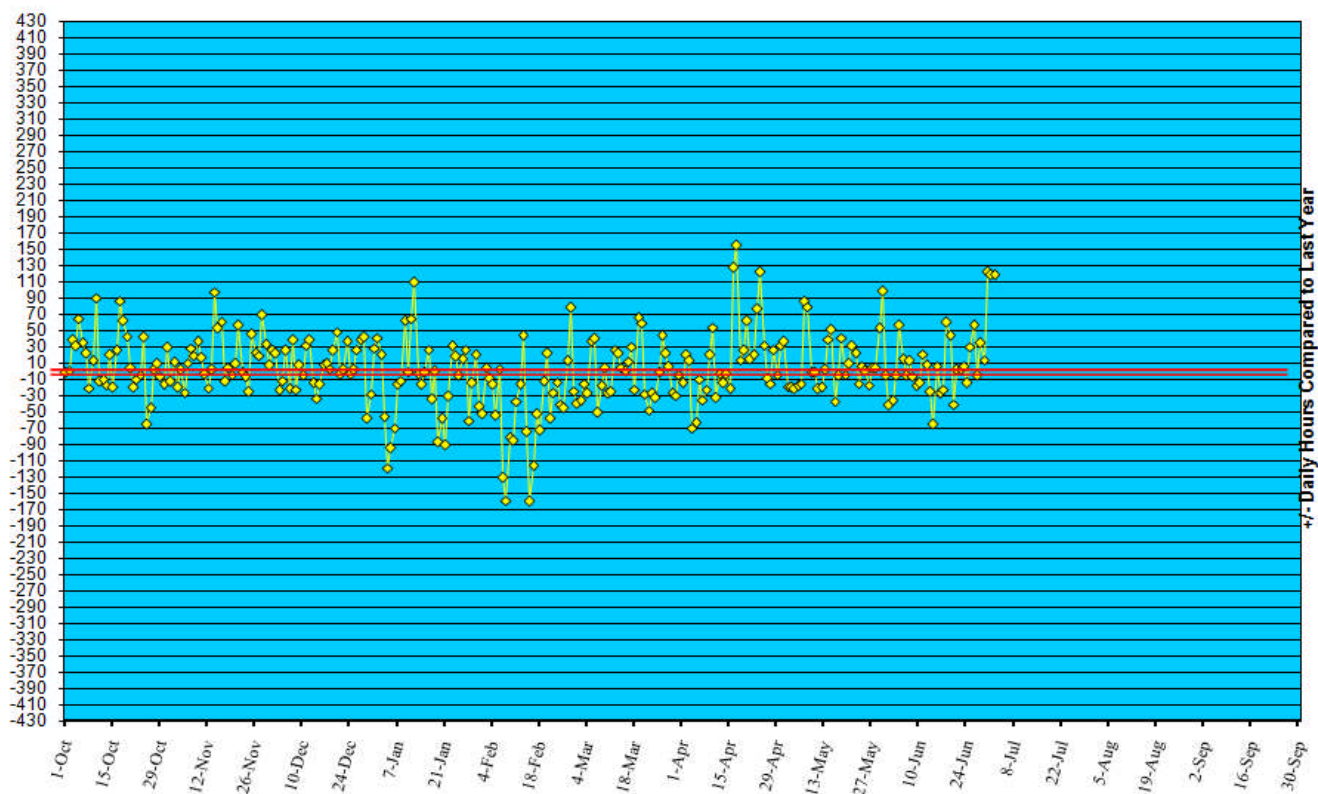


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '11 to June 30, '12



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:

New cases (June 24 – June 30, 2012):

Prior week (June 17 – June 23, 2012):

Week#26, 2011 (June 25 – July 1, 2011):

Aseptic

15

9

14

Meningococcal

0

0

0

2 Gastroenteritis outbreaks

3 Respiratory illness outbreaks

2 Rash illness outbreaks

2 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Daycare Centers

MARYLAND SEASONAL FLU STATUS

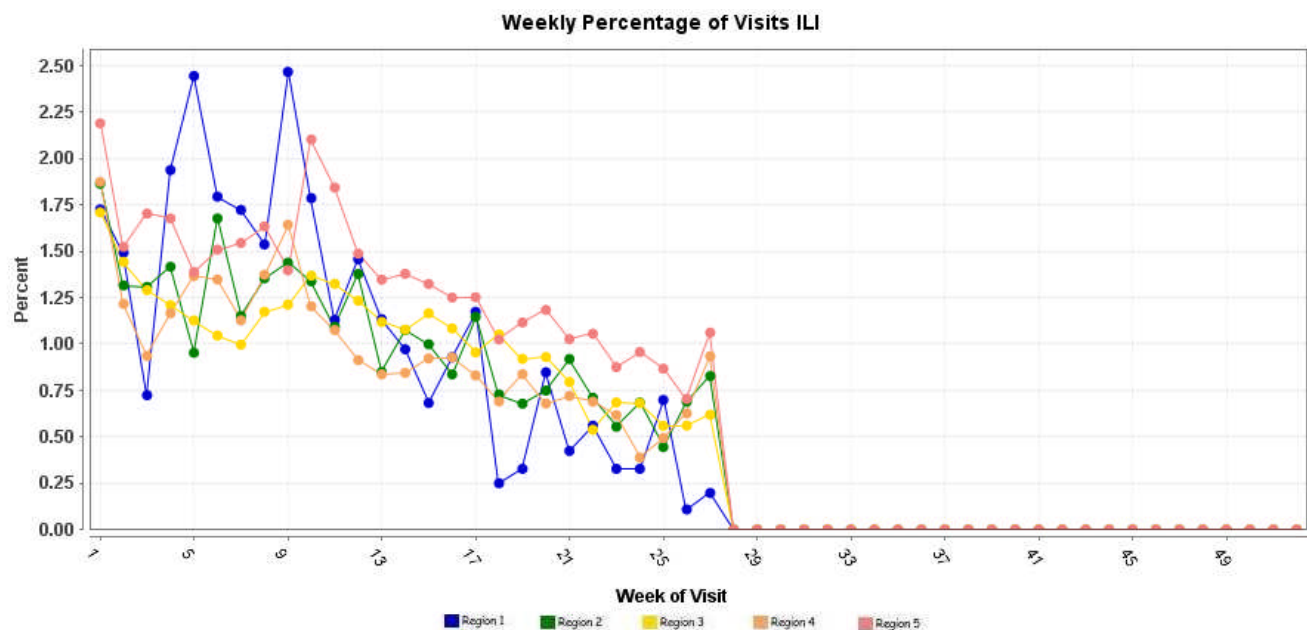
Seasonal Influenza reporting occurs October through May.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

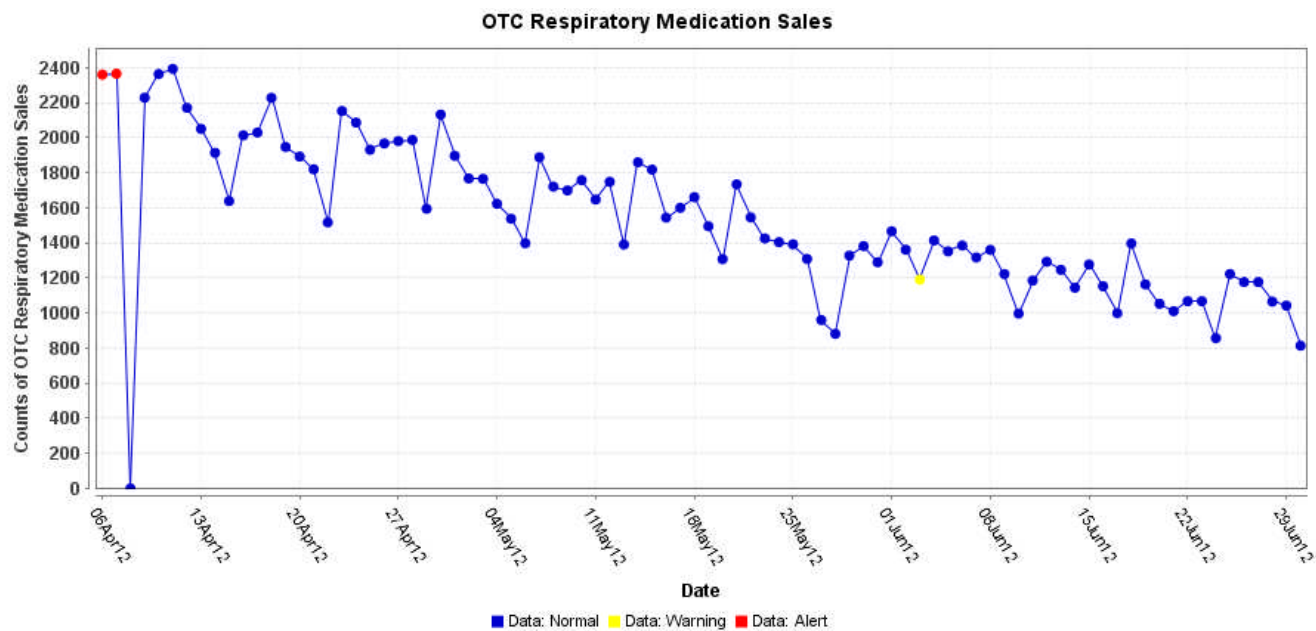
Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.





OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of June 7, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 606, of which 357 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS

VIBRIO PARAHAEOLYTICUS (MISSOURI): 29 June 2012, The Missouri Department of Health and Senior Services (DHSS) is investigating a cluster of cases of vibriosis in eastern Missouri which were identified 27-28 Jun 2012. 3 cases of *Vibrio parahaemolyticus* [infection] have been identified during this time period. Typically, this infection is associated with eating raw or undercooked shellfish, particularly oysters. The investigation is ongoing. DHSS recommends that any person who has signs or symptoms of acute gastroenteritis after consuming raw or undercooked shellfish should seek medical care. Health care providers should consider obtaining stool cultures for Vibriosis in such patients. Vibriosis is caused by *Vibrio* bacteria, such as *V. parahaemolyticus* that grow in coastal waters. Risk factors for acquiring gastrointestinal *Vibrio* infections include: eating raw or undercooked shellfish (oysters, clams, mussels) or crabs; or cross-contamination of other foods and surfaces with raw shellfish or crabs during preparation. Disease symptoms may include: nausea, vomiting, diarrhea, abdominal cramps, and in some cases, signs of severe infection (septicemia), including fever and low blood pressure. Symptoms can start from 4 to 96 hours after eating contaminated food. Vibriosis can be a mild to serious disease. People with weakened immune systems, especially those with liver disease, diabetes, and peptic ulcers, are at highest risk for serious disease. The infection is not normally communicable from person to person. *Vibrio* infections can be treated with antibiotics. Most episodes of diarrhea are mild and self-limited, and do not require treatment other than oral rehydration. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (USA): 25 June 2012, CDC is collaborating with public health and agriculture officials in many states and the USDA Animal and Plant Health Inspection Service, National Poultry Improvement Plan, and Veterinary Services to investigate an outbreak of human *Salmonella* [enteric serotype] *Montevideo* infections linked to chicks and ducklings from Estes Hatchery in Springfield, Missouri. Public health investigators are using the PulseNet system to identify cases of illness that may be part of this outbreak. In PulseNet, the national subtyping network of public health and food regulatory agency laboratories coordinated by CDC, DNA "fingerprints" of *Salmonella* bacteria are obtained through diagnostic testing with pulsed-field gel electrophoresis, or PFGE, to identify cases of illness that may be part of this outbreak. Contact with live poultry can be a source of human salmonellosis. You should always wash hands thoroughly with soap and water right after touching live poultry or anything in the area where they live and roam. Adults should supervise hand washing for young children. Additional recommendations are available. Mail-order hatcheries, agricultural feed stores, and others who sell or display chicks, ducklings, and other live poultry should provide health-related information to owners and potential purchasers of these birds prior to the point of purchase. This should include information about the risk of acquiring a salmonellosis from contact with live poultry. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

E. COLI EHEC (FRANCE): 25 June 2012 One adult and 4 children were admitted last week [week of 18 Jun 2012] to hospitals in Bordeaux and Pau. They were suffering from symptoms of *E. coli* infection. As of 25 Jun 2012, 3 are still in hospital in Bordeaux. The studies carried out have "confirmed the presence of *E. coli* O157 in 1 case and "the results are expected on 26 Jun 2012" for the others. The 3 children were admitted to the hospital between 15-20 Jun 2012 and all 3 consumed hamburgers manufactured by the Societe des Viandes Elaborees d'Estillac in the Lot-et-Garonne. The direct link with the hamburgers is not confirmed. For precaution, the Intermarche and Netto supermarkets, which have marketed these steaks, have asked their consumers to be vigilant. The affected stores have put information signs in place. 16 departments in the Southwest are affected, including the Gironde, Dordogne, Landes, Lot-et-Garonne, and the Pyrenees-atlantiques. The deadline for consumption of these hamburgers (15 Jun 2012) has already passed but for precaution, the distributor and the manufacturer are asking people who have retained these products in their freezer, "not to consume them and return them to where they were been purchased." According to a statement released yesterday [25 Jun 2012] by the Ministry of Agriculture and Agri-Food, the manufacturer indicated that hamburgers with the trademarks Jean Roze, Netto, and Top Budget were affected. They were sold under the reference "fresh ground beef 15 percent fat" and "fresh ground beef 20 percent fat" with a deadline for consumption between 28 May 2012 and 15 Jun 2012. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEPTOSPIROSIS (THAILAND): 25 June 2012, There is an outbreak of leptospirosis in the northeastern part of Surin district [Surin province]. 107 cases have been confirmed and 7 people are dead. Health authorities of the prefecture consider farmers at great risk and recommend that they wear rubber boots and rubber gloves in order to prevent infection during farm work. Leptospirosis is an infection caused by Gram negative bacteria of the genus *Leptospira* (the natural host are wild animals such as rats). It is a zoonotic disease and infection occurs orally and percutaneously from water and soil. In humans, the incubation period is about 3-14 days and symptoms include chills, fever, headache, malaise, and myalgia. In the mild form, patients soon recover. However, in the severe form (Weil's disease), jaundice, bleeding, kidney failure, and liver damage are observed, and the mortality rate is 5-50 percent. Epidemics of leptospirosis occur from July to October in Southeast Asia, including Thailand. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI O157 (NEW BRUNSWICK): 29 June 2012, Romaine lettuce has been determined to be the likely source of an *E. coli* O157 outbreak in Miramichi in April 2012. The Department of Health released on Fri 29 Jun 2012 results of a case control study which examined 55 people, including 18

individuals who were sick and 37 people who were not sick. The study looked at what the people ate to determine if there were any patterns. Dr Eilish Cleary, the chief medical officer of health, said all of those in the study who were sick appear to have consumed romaine lettuce. "The lettuce was used in salads, as an ingredient in wraps and hamburgers, and as a garnish. These results indicate a strong likelihood that contaminated lettuce was served at the restaurant," Cleary said in a statement. The Public Health Agency of Canada helped the province's health department on the control study. The experts focused on the food items eaten by those who ate at Jungle Jim's in Miramichi between 23 and 26 Apr 2012. The health department said information from the study will be used to bolster food safety measures. The federal agency became aware that cases matching the *E. coli* strain involved in the Miramichi outbreak had also been identified in Quebec and California (USA), according to the province's statement. The lettuce is no longer in the marketplace and the investigation has been closed, the department said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website:
<http://preparedness.dhmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: ZFaigen@dhmh.state.md.us

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: ASalim@dhmh.state.md.us

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable